

Mr. Doug McKinzie
Avery Dennison - Fasson Roll Division
3011 Independence Drive
Fort Wayne, IN 46808

Re: 003-11910
First Significant Source Modification to
Part 70 permit No.: T003-7451-00196

Dear Mr. McKinzie:

Avery Dennison - Fasson Roll Division was issued Part 70 operating permit T003-7451-00196 on December 31, 1998 for a pressure sensitive paper coating and laminating operation. An application to modify the source was received on February 16, 2000. Pursuant to 326 IAC 2-7-10.5 the following modification is approved for construction at the source (changes are crossed out and bolded for emphasis):

1. Two (2) pressure sensitive paper coating operations, constructed in 1984 and 1986, identified as FW1 and FW2, with a maximum capacity of 400 and ~~418~~ **598** billion square inches per year, FW1 exhausting to ten (10) stacks (A, C, D, E, F, G, M, BB, ZI-3 and ZE-1) and FW2 exhausting to nineteen (19) stacks (B, J, K, L, O, P, ZI-1, ZI-2, ZI-3, ZI-4, ZI-5, ZI-6, ZI-7, ZI8, ZI-9, ZI-10, ZE-2, ZE-3 and ZE-4), consisting of the following equipment:

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Management (OAM).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The proposed operating conditions applicable to these emission units are attached to this Source Modification approval. These proposed operating conditions shall be incorporated into the Part 70 operating permit as an administrative amendment in accordance with 326 IAC 2-7-10.5(l)(1) and 326 IAC 2-7-11.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Nysa L. James or extension (3-6875), or dial (317) 233-6875.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments

NLJ

cc: File - Allen County
U.S. EPA, Region V
Allen County Health Department
Air Compliance Section Inspector Jennifer Schick
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (1) Two (2) pressure sensitive paper coating operations, constructed in 1984 and 1986, identified as FW1 and FW2, with a maximum capacity of 400 and 598 billion square inches per year, FW1 exhausting to ten (10) stacks (A, C, D, E, F, G, M, BB, ZI-3 and ZE-1) and FW2 exhausting to nineteen (19) stacks (B, J, K, L, O, P, ZI-1, ZI-2, ZI-3, ZI-4, ZI-5, ZI-6, ZI-7, ZI-8, ZI-9, ZI-10, ZE-2, ZE-3 and ZE-4), consisting of the following equipment:
- (A) One (1) flow coating operation; and
 - (B) Two (2) natural gas fired bake ovens, with total heat input capacity of 35.68 million British thermal units per hour;

Insignificant Activities:

- (IA1) Four (4) cold cleaner degreasing operations;
- (IA2) Three (3) water based emulsion storage tanks, with maximum storage capacity of 12,200, 12,700, and 12,200 gallons.
- (IA3) One (1) water based emulsion storage tank, with maximum storage capacity of 15,000 gallons;
- (IA4) Five (5) water based emulsion storage tanks, with maximum storage capacity of 15,954 gallons each;
- (IA5) One (1) water based emulsion storage tank, with maximum storage capacity of 12,000 gallons; and
- (IA6) Two (2) water based emulsion storage tanks, with maximum storage capacity of 13,152 gallons each.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-5]

Pursuant to 326 IAC 8-2-5 (Paper Coating Operations), no owner or operator of facility engaged in the surface coating of pressure sensitive paper may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 2.9 pounds VOC per gallon of coating excluding water delivered to the coating applicator.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 12] [40 CFR 60.440, Subpart RR]

Pursuant to this 40 CFR 60.442, Subpart RR, when the pressure sensitive paper coating operation input Volatile Organic Compound (VOC) usage exceeds 45 megagrams per 12 consecutive month period (equivalent to 49.6 tons per 12 consecutive month period), the pressure sensitive paper coating operation shall not discharge into the atmosphere in excess of 0.20 kg VOC per kg of coating solids (0.20 lb VOC per lb of coating solids) applied as calculated on a weighted average basis for one calendar month.

D.1.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;

**Indiana Department of Environmental Management
Office of Air Management**

Addendum to the
Technical Support Document for the First Part 70 Significant Source Modification

Source Name:	Avery Dennison - Fasson Roll Division
Source Location:	3011 Independence Drive, Fort Wayne, IN 46808
County:	Allen
SIC Code:	2672
Operation Permit No.:	T 003-7451-00196
Operation Permit Issuance Date:	December 31, 1998
First Significant Source Modification No.:	T 003-11910-00196
Permit Reviewer:	Nysa L. James

On March 25, 2000, the Office of Air Management (OAM) had a notice published in the Fort Wayne Journal and Gazette, Fort Wayne, Indiana, stating that Avery Dennison - Fasson Roll Division had applied for a modification relating to the upgrade of FW-2 coater which will increase the speed of the machine from 850 feet per minute to 1200 feet per minute. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, OAM has made the following determination:

Comment 1: On page 4 and 5 of the technical support document, the OAM describes the compliance requirements of the source. Based on the addendum to the Title V permit, issued December 31, 1998, the compliance requirements were removed since there were no dry filters used in the surface coating operations. Therefore, the OAM acknowledges that the compliance requirements listed in the technical support document, pages 4 and 5, do not apply to the source and should be disregarded for future reference.

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for the First Part 70 Significant Source Modification

Source Background and Description

Source Name:	Avery Dennison - Fasson Roll Division
Source Location:	3011 Independence Drive, Fort Wayne, IN 46808
County:	Allen
SIC Code:	2672
Operation Permit No.:	T 003-7451-00196
Operation Permit Issuance Date:	December 31, 1998
First Significant Source Modification No.:	T 003-11910-00196
Permit Reviewer:	Nysa L. James

The Office of Air Management (OAM) has reviewed a modification application from Avery Dennison - Fasson Roll Division relating to the upgrade of FW-2 coater which will increase the speed of the machine from 850 feet per minute to 1200 feet per minute.

History

On February 16, 2000, Avery Dennison - Fasson Roll Division submitted an application to the OAM requesting a modification to the existing FW-2 coater. Avery Dennison - Fasson Roll Division was issued a Part 70 permit on December 31, 1998.

Changes Proposed

The Office of Air Management (OAM) has reviewed an application from Avery Dennison - Fasson Roll Division, relating to the first significant source modification to their existing Part Operating Permit. The modification consists of an upgrade to the existing FW-2 coater, which will increase the speed of the machine from 850 feet per minute to 1200 feet per minute. The source is proposing the following changes (changes are bolded and stricken out for emphasis):

1. Section D.1, Facility Description listed on page 26 of 36, is revised to reflect the increase in speed of the FW-2 coater and is as follows (changes are bolded and stricken out for emphasis):
 - (1) Two (2) pressure sensitive paper coating operations, constructed in 1984 and 1986, identified as FW1 and FW2, with a maximum capacity of 400 and ~~418~~ **598** billion square inches per year, FW1 exhausting to ten (10) stacks (A, C, D, E, F, G, M, BB, ZI-3 and ZE-1) and FW2 exhausting to nineteen (19) stacks (B, J, K, L, O, P, ZI-1, ZI-2, ZI-3, ZI-4, ZI-5, ZI-6, ZI-7, ZI8, ZI-9, ZI-10, ZE-2, ZE-3 and ZE-4), consisting of the following equipment:
 - (A) One (1) flow coating operation; and

- (B) Two (2) natural gas fired bake ovens, with total heat input capacity of 35.68 million British thermal units per hour;

Insignificant Activities:

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(IA3) One (1) water based emulsion storage tank, with maximum storage capacity of 15,000 gallons;
(IA4) Five (5) water based emulsion storage tanks, with maximum storage capacity of 15,954 gallons each;
(IA5) One (1) water based emulsion storage tank, with maximum storage capacity of 12,000 gallons; and
(IA6) Two (2) water based emulsion storage tanks, with maximum storage capacity of 13,152 gallons each.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on February 16, 2000, additional information was received on March 6, 2000

Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	0.00
PM-10	0.00
SO ₂	0.00
VOC	21.99
CO	0.00
NO _x	0.00

HAP's	Potential To Emit (tons/year)
Vinyl Acetate	17.00
TOTAL	17.00

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(6) because the single HAP potential to emit is greater than ten (10) tons per year, therefore this modification is determined as being significant. This is the first significant source modification to the source.

County Attainment Status

The source is located in Allen County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Allen County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Allen County has been classified as attainment or unclassifiable for CO, PM₁₀ and SO₂. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	6.0
PM-10	7.6
SO ₂	0.2
VOC	98.3
CO	23.3
NO _x	27.7

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.

Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO ₂ (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO _x (ton/yr)
Proposed Modification	0.00	0.00	0.00	21.99	0.00	0.00
PSD Threshold Level	250	250	250	250	250	250

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CAR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

There are no changes in Federal rule applicability from the original Part 70 Operating Permit.

State Rule Applicability - FW-2 Coater

There are no changes in State rule applicability from the original Part 70 Operating Permit.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The water based emulsion mixing operation has applicable compliance monitoring conditions as specified below:
 - (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, daily observations shall be made of the overspray while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

- (b) Weekly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an overspray emission, evidence of overspray emission, or other abnormal emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

This monitoring conditions is necessary because the dry filters for the water based emulsion mixing operation must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed First Part 70 Significant Source Modification No. 003-11910-00196.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

Page 1 of ? TSD App A

Company Name:
Address City IN Zip:
CP:
Plt ID:
Reviewer:
Date:

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

63.2

554.0

Pollutant						
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.5	2.1	0.2	27.7	1.5	23.3

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions

Page 2 of ? TSD App A

Company Name:
Address City IN Zip:
CP:
Plt ID:
Reviewer:
Date:

HAPs - Organics

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	5.817E-04	3.324E-04	2.077E-02	4.986E-01	9.418E-04

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	1.385E-04	3.047E-04	3.878E-04	1.053E-04	5.817E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.